Are Real Interest Rates Too High?

Money Marketeers of New York University
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As I travel around talking about monetary policy—sometimes in speeches and sometimes with professional friends in a casual setting—a common question concerns my views about interest rates. Of course, I always beg off when the question concerns possible future FOMC actions; however, when the question concerns how I interpret the current level of the real, or inflation-adjusted, rate of interest, I find the topic more congenial. In many cases, the "question" put to me is more a claim than a question. Real interest rates are high, so the argument goes, and the claim follows that monetary policy is restrictive. This evening gives me an opportunity to discuss this issue with some care, and I think it safe to assume that the issue is of interest to this group.

Before proceeding, I want to emphasize that the views I express here are mine and do not necessarily reflect official positions of the Federal Reserve System. I thank my colleagues at the Federal Reserve Bank of St. Louis—especially Mike Pakko—for their assistance and comments, but I retain full responsibility for errors.

Given the sensitivities and ample opportunities for misinterpretation whenever a Fed official discusses interest rates, I want to be absolutely clear that my remarks tonight have nothing to do with my own position on short-run monetary policy. My topic tonight concerns the average level over time of the real, or inflation-adjusted, rate of interest. I am not talking about the nominal federal funds rate for which the Fed determines an intended range at each meeting of the Federal Open Market Committee.

Viewed historically, nominal interest rates in the United States are high today compared with the trend rate of inflation—in other words, the real rate of interest is high. For example, the interest rate on 1-year U.S. Treasury securities is currently roughly 5 percent. If we take the recent inflation trend of around 2 percent to be a good indicator of the outlook for future inflation, then the real rate on 1-year T-bills is about 3 percent. This real rate compares with an average inflation-adjusted return on 1-year T-bills of less than 2 percent over the past 50 years. Similarly, the real yield on long Treasuries is about 4 percent today, which is about 1 percentage point higher than typical for the U.S. economy.

Some point to this observation as evidence that monetary policy is too tight—that the Fed is somehow forcing real interest rates up and choking off economic growth. In my remarks this evening, I'd like to focus on the proposition that high real interest rates are not a constraint to growth, but in fact are a consequence of an economy in the midst of a robust expansion, with optimistic prospects for the future. Indeed, if I were to try to be provocative, I'd say that I wish real interest rates were even higher today than they are. I'd say that because of my conviction that an economy enjoying even faster productivity growth and even better opportunities for profitable business investment than we see in today's economy would be characterized by a higher real rate of interest than we see in the market today.

Before anyone pulls out a cell phone to report that, "Poole sees need for higher rates," let me say that my choice of this topic tonight reflects my frustration that reporting about interest rates concentrates almost exclusively on the supply side of the credit market, which the Fed influences, and neglects the demand side of the credit

market, which is determined by economic fundamentals. My basic message is that all of us should crave an even more robust economy, which would in turn yield an even higher real rate of interest, than we have seen over the last few years.

I'll proceed by first outlining a few measurement issues before getting into the meat of my argument—the state of investment demand and saving supply in the U.S. economy over recent years. I'll then turn to the issue of inflation uncertainty before concluding with a few general comments. I hope that I can provoke you enough to ask a few questions when I finish.

HOW REAL IS THE REAL RATE?

In some sense, the convention in economics of referring to an inflation-adjusted interest rate as a "real interest rate" is misleading. The real rate of interest is not real in the sense that we can go out and easily observe it the economy. Certainly, we can measure the inflation-adjusted return that an investor receives after a debt contract has matured, but this ex post measure tells us only how inflation has eroded the return on an investment over some past period.

When it comes to analyzing current economic conditions and evaluating the outlook for the future, a more relevant measure of the real interest rate is a forward-looking measure. Since the decisions of savers and investors in an economy are predicated on their expectations about the future, it is the level of current market interest rates adjusted for expected future inflation—the ex ante real rate of interest—that matters.

Measuring expectations, of course, is an inherently difficult matter. We can conduct surveys, estimate statistical models, draw inferences from economic theory, but we can never measure precisely the public's attitude about the outlook for inflation. In fact, it is precisely this prospect of disentangling inflation expectations from observed market interest rates that makes the evaluation of real interest rates so challenging.

We are fortunate today to be able to observe yields on indexed bonds, but even here, a measurement issue clouds the picture. The indexed Treasury issues trade infrequently, and some part of their measured yield reflects their relative illiquidity. In any event, to analyze real rates in historical perspective, we have to make judgments about measurements before the indexed Treasury bonds were available in the market.

WHY SO HIGH?

Drawing on what we do know about its behavior, a high real interest rate is not something that we should necessarily fear. In the current economic expansion, characterized by a high rate of investment spending and the potential for rising productivity growth, a high real interest rate is exactly what we should expect.

This observation does not mean that a high real rate is something we should strive for or embrace as a monetary policy objective. The inflation expectations built into market interest rates, however rational, are not always correct. If at any given time, the inflationary potential of the monetary policy in place is not fully recognized, overly expansionary policy might be associated with excess demand pressures for goods and services that would put upward pressure on interest rates, both nominal and real.

Interpreting the real interest rate is consequently a difficult prospect. But as we consider the factors that likely underlie its recent behavior, both economic theory and recent history suggest that, while there is good reason to monitor the real rate's behavior closely for indications about the appropriate stance of monetary policy, its current level gives little cause for alarm.

Indeed, I am convinced that the real rate of interest in the bond market is high today for all the right reasons. Funds invested in the bond market have to compete with funds invested in productive businesses. We know that business investment spending is strong; that in recent years, corporate earnings have grown smartly; that the stock market valuations reflect confidence in the future; and that economywide productivity growth has surged since 1995. These are all signs of a

high return on invested capital. We have a lot to celebrate in this economy, and the high real rate in the bond market reflects the fundamentals we celebrate.

INVESTMENT AND THE REAL RATE

One of the most distinctive features of the current economic expansion has been the strength and persistence of investment spending. In 1998, real fixed investment rose to nearly 17 percent as a proportion of GDP, surpassing recent cyclical peaks of around 15 percent and setting a record high for the post-World War II period. This rate of investment shows little sign of abating.

The rapid rate of investment is surely one of the most important factors in explaining high real interest rates. The financing of investment spending draws on the availability of loanable funds in the economy. As firms compete for funds to finance their investment projects, rising interest rates serve as the key mechanism by which credit markets efficiently allocate resources to the most productive ventures.

Evidence suggests that the current investment boom is related to the adoption of new technologies in information processing and telecommunication. For example, the share of overall fixed investment spending devoted to information processing equipment has risen sharply in the latter half of the 1990s, increasing from 28 percent in 1995 to more than 40 percent so far this year.

As rapid investment spending contributes to an upgrading of the nation's capital stock, the prospects for rising productivity in the future are enhanced as new technologies are adapted and integrated into production processes. A high real interest rate in the bond market today is a forecast of productivity gains in the future. I surely hope that forecast is correct.

GROWTH, SAVING AND THE REAL RATE

On the other side of the ledger, the recent decline in the U.S. saving rate may be another contributing factor to the level of real interest rates. A low saving rate can strain the availability of loanable funds in the economy. The resulting scarcity of funds reinforces the upward pressure put on real interest rates by rapid investment spending.

Indeed, saving rates have fallen precipitously over the past four or five years. The personal saving rate declined from about 3.5 percent in 1994 to near zero over the past year. Negative personal saving rates have even been measured over the first two quarters of 1999.

Of course, measurement issues crop up in evaluating the saving rate: Saving is calculated as a residual from the data on personal income and spending, and the income measure used for these calculations does not incorporate unrealized capital gains. Given the recent run-up of equity values, the omission of prospective capital gains represents a potentially important factor in the measurement of the saving rate. These technical issues aside, however, it seems clear that the current rate of saving is low in the United States, particularly at this stage in a mature economic expansion.

Economic theory tells us that as people make their consumption and saving decisions over the business cycle, we should expect to see saving rates rise over the course of an expansion. In the early stages of an expansion, pent-up demand usually gives rise to rapid spending and low saving. Near the cycle peak, however, the pace of spending subsides, and the saving rate should rise as people set aside a higher proportion of their income gains as a hedge against leaner times in the future.

This pattern is typical of what we usually observe in the data as well. The saving rate tends to fall as the economy enters a recession, but then rises as the economic recovery matures. The dramatic, sustained decline in the saving rate in the late 1990s is somewhat unusual in this regard and represents another distinguishing characteristic of the current expansion.

One explanation for the current pattern is that people do not foresee the need to set aside resources for the future. Perhaps people's expecta-

tions for future growth have been revised upward, and current economic conditions are seen merely as a foretaste of the prosperity to come.

Indeed, if the slowdown in productivity growth that began in the 1970s has truly turned around—as I and many others have suggested—then a low saving rate would not be surprising. Correspondingly, a rising growth trend for the U.S. economy would suggest a lasting rise in real interest rates, since it is the underlying growth rate of productivity that ultimately determines both the economy's growth rate and the rate of real return available to savers and investors.

Although I would like to see a higher saving rate in the United States, my judgment is that the low personal saving rate has little or nothing to do with the level of the U.S. real rate of interest today. World capital markets are highly integrated, and the flow of capital into the United States from abroad is large. Thus, in explaining the level of U.S. real rate of interest, I put my emphasis on the robust U.S. economy and the tremendous investment opportunities it offers.

THE LINGERING LEGACY OF INFLATION

The foregoing analysis of economic fundamentals provides us with some insight into why real interest rates are high; moreover, it gives cause for optimism about future prospects for the U.S. economy. There are other reasons to be somewhat less sanguine, however.

One difficulty of disentangling inflation expectations from the real interest rate is the issue of inflation uncertainty. A risk premium associated with this uncertainty could cause measured real rates to be high. That is, when we subtract reasonable estimates of expected inflation from market interest rates, we are left with a measure that combines the true, underlying real rate and a component that compensates for the risk associated with uncertainty about future inflation. The measured high real rate—the nominal bond yield less expected inflation—might therefore reflect the lingering legacy of past inflation and fears that those dark days might return.

Some fascinating recent research by Martin Evans, of NYU, on the experience of the United Kingdom during the 1980s highlights the importance of inflation risk in the decomposition of market rates into real and expected inflation components. Evans examines the behavior of U.K. interest rates, comparing returns on Britain's inflation-adjusted bonds with those of comparable nominal bonds. His findings confirm those of previous researchers who suggest that uncertainty about future inflation gives rise to a risk premium in market rates on nominal bonds that is significant and that varies over time. Moreover, this risk premium appears to be related to fears of a dramatic resurgence of inflation that is unlikely to occur, but would be devastating if it did.

Concerns about such low-probability events are more likely to be present in economies that have gone through recent bouts of high inflation. Anecdotal evidence suggests that such lingering fears can be slow to dissipate. For example, many astute observers have suggested that the Bundesbank's anti-inflation fervor since World War II, and the public support for such policies, may well be related to the experience of German hyperinflation in the early 1920s!

Along these lines, the recently retired director of research at the St. Louis Fed, William Dewald, has often argued that measured real interest rates constitute an indicator of monetary policy credibility. In particular, he suggests that countries with relatively high measured real interest rates are those in which concerns about rising inflation are more prevalent.

If measured real rates in the United States are indeed an indicator of this type of inflation uncertainty, then rates could decline if the Fed were able to offer more clear assurance that inflation will not resurface in the future. Public opinion and market sentiment, however, already appear to grant a great deal of credibility to the Federal Reserve's commitment to keeping inflation in check.

Minimizing the probability of unexpected fluctuations in the inflation rate will continue to be an important objective of monetary policy. Ultimately, the only true way we will be able to

enhance credibility in this regard is through sustained high performance.

WHEN SHOULD WE WORRY?

Another potential concern about the level of real interest rates is the possibility that high rates are being driven by unsustainable aggregate demand growth. As strange as this may sound, estimates of high real interest rates might indicate an overly stimulative monetary policy stance—one with future inflation potential that has yet to be fully recognized.

Market expectations, however rational, are not always correct. If high market interest rates reflect overly robust aggregate demand, fueled by an excessively stimulative monetary policy, then a high real interest rate—conditioned on the presumption that inflation will remain in check—might be an indicator of incipient inflationary pressures.

The confidence that markets have shown in the Fed's commitment to price stability is heartening, but if that confidence turns out to have been misplaced, the goal of long-term price stability will be even more difficult to attain. Consequently, a key challenge facing monetary policymakers is to determine whether today's provision of liquidity to the economy is appropriate for maintaining maximum sustainable growth (in an environment where that maximum is uncertain) or whether it is fueling unsustainable aggregate demand growth that will ultimately lead to inflation.

In making that judgment, we should take in account everything we know about expectations regarding prospects for economic growth and inflation. If we can infer that information from measures of the real interest rate, we would be foolish to ignore it. But we must also recognize the potential pitfalls of misinterpretation.

CONCLUDING REMARKS

I hope that I have conveyed to you both the richness of the information contained in the real interest rate, as well as some of the problems that economists and policymakers face in trying to extract that information. Research on the measurement and interpretation of real rates will undoubtedly continue, giving us greater clarity with which to evaluate the signals about the economy that are embedded in interest rates.

As a final comment on the level of the real interest rate in recent years, I'd like to again view our current situation in the perspective of recent history. The real rate may be somewhat high today, but not so long ago it was near zero. Real rates were low in the early 1990s, as the economy emerged only sluggishly from the recession of 1990-91. An even more significant period of low real rates was in the late 1970s, when inflation was accelerating and economic growth was stagnant.

Given the choice of living in a world with low real interest rates, reflecting some combination of high inflation and low economic growth, or living in a world with high real rates, reflecting rapid growth and an optimistic outlook for the future, I have no problem in deciding which world to choose. I doubt that any of you have a problem making this choice either.